

ABSTRACT

The present invention relates to the monitoring of gas concentrations possible in very low ranges (i.e., low ppb and even ppt ranges) and especially use thereof in environmental monitoring, exposure assessment, bomb detection, and health studies. The invention can use a spatial and temporal assessment of gas concentrations that enables the sources of the gas in question to be located and identified which is useful in environmental and health field but can also be applied to other fields an example of which is detecting and locating explosives. This technology can uses small, light weight, and low power components that allow for the monitor to be portable and even worn on a person as a personal monitor. This technology can be used in a stationary monitors as well.